



Air Pollution Control Board

San Diego County Air Pollution Control District

Governing Body

GREG COX
First District

DIANNE JACOB
Second District

PAM SLATER-PRICE
Third District

RON ROBERTS
Fourth District

BILL HORN
Fifth District

AGENDA ITEM

DATE: February 24, 2010

TO: San Diego County Air Pollution Control Board

SUBJECT: **NOTICED PUBLIC HEARING - ADOPTION OF AMENDED RULE 69.3.1 – STATIONARY GAS TURBINE ENGINES – BEST AVAILABLE RETROFIT CONTROL TECHNOLOGY** (District: All)

SUMMARY:

Overview

Adoption by the Air Pollution Control Board is requested for proposed amended Rule 69.3.1, regulating emissions of nitrogen oxides from new and existing gas turbine engines. Nitrogen oxides emitted to the atmosphere as a result of fuel combustion in this equipment play a role in ozone formation. San Diego County does not yet attain State and federal air quality standards for ozone, a major component of smog.

The rule is proposed for amendment to reduce high daily nitrogen oxide emissions from certain older existing turbines that provide electrical power during periods of peak electrical demand and to provide limited exemptions, when necessary, for startups of combined-cycle turbine power plants and other operations of modern turbines with low emitting combustion systems. These exemptions will remove potential economic and technological feasibility constraints on the operation of existing large combined-cycle turbine power plants and remove a potential barrier to construction of these highly efficient power plants in the future.

Upon full implementation, the rule will reduce emissions of nitrogen oxides from the peaking turbines by up to 1.65 tons per day. The limited exemptions for combined-cycle power plants do not cause a significant emission increase and, overall, will benefit air quality.

Adoption of the amended rule will help fulfill State requirements to implement every feasible control measure as identified in the Air Pollution Control District's 2009 Regional Air Quality Strategy to achieve the ambient air quality standards for ozone.

Recommendation(s)

AIR POLLUTION CONTROL OFFICER

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1. Find, on the basis of the whole record, that there is no substantial evidence that the project will have a significant effect on the environment. Consider the Initial Study and Negative Declaration together with comments received during public review, and adopt the resolution titled Resolution Adopting the Negative Declaration for Proposed Amendments to Rule 69.3.1 (Stationary Gas Turbine Engines).
2. Adopt the resolution entitled Resolution Adopting Amended Rule 69.3.1 – Stationary Gas Turbine Engines – Best Available Retrofit Control Technology of Regulation IV of the Rules and Regulations of the San Diego County Air Pollution Control District.

Fiscal Impact

Proposed amended Rule 69.3.1 will not have a significant fiscal impact on the Air Pollution Control District. The rule will be enforced with existing Air Pollution Control District staff.

Business Impact Statement

Adopting amended Rule 69.3.1 will not adversely impact the business community. New peaking turbines will not be affected. The cost is minimal for the older peaking turbines affected by the proposed amendments to the rule and their operations will not be significantly impacted. The proposed limited exemptions will enable existing and future new combined-cycle turbines to comply with the rule with certainty, because they are allowed longer startup times.

Advisory Board Statement

At its meeting on December 9, 2009, with a quorum present, the Air Pollution Control District Advisory Committee expressed support of the Air Pollution Control District's recommendations.

BACKGROUND:

San Diego County currently does not meet the National and State Ambient Air Quality Standards for ozone and is classified as an ozone nonattainment area. Both federal and State laws require the San Diego County Air Pollution Control District (District) to implement rules that regulate emissions of ozone precursors - volatile organic compounds and nitrogen oxides (NOx). Specifically, the District is required by State law to adopt every feasible measure to reduce ozone precursor emissions. In its triennial Regional Air Quality Strategy (RAQS), the District preliminarily determined that one such potential feasible measure was reducing NOx emissions from peaking power plants that use older gas turbines. Though these older peaking turbines do not operate during many days per year (peaking power plants typically operate on days of high electrical demand), their impact on air quality can be significant on the days they do operate.

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Proposed amended Rule 69.3.1 reduces NOx emissions from these gas turbine engines to implement the State's every feasible measure requirements.

Proposed amendments to Rule 69.3.1, if adopted, will limit daily NOx mass emissions from these older peaking turbines on days with forecasted high ozone levels. To ensure adequate electricity supplies, the proposed new limit does not apply when there might be an electrical power shortage. To provide flexibility to the owners, the proposed limit is aggregated over all the peaking turbines under common ownership.

When fully implemented, the new emission limits in Rule 69.3.1 will affect 14 gas turbines and reduce NOx emissions from those units up to 1.65 tons per day. The estimated cost-effectiveness is about \$5.50 per pound of NOx reduced on an annual basis (see Attachment E, Socioeconomic Impact Assessment). All the affected turbines are owned by two large power companies.

The proposed rule amendments would also extend the maximum allowable exemption from the NOx standards in the rule up to 360 minutes from the existing 120 minutes during cold startups for combined-cycle turbines. This would result in additional actual emissions of less than 0.25 tons per year from the two existing facilities during these infrequent events (about two times per year per facility) while encouraging use of these low-emitting combined-cycle power plants. Without the rule revision, combined-cycle power plants could not comply and utilities would be forced to use dirtier and less efficient simple cycle power plants. The rule amendments also allow limited operations at low load levels to address operational problems with some low-NOx combustion systems. No emission increases are anticipated from the limited low-load operations since potential turbine shutdowns are avoided.

To maintain separate State and federal requirements, amended Rule 69.3.1 will not be submitted to the federal Environmental Protection Agency (EPA) for approval into the State Implementation Plan (SIP) and will not be federally enforceable by EPA. This ensures that industry is not subjected to federal enforcement of State-only requirements.

On August 3, 2007, the District held a public workshop to discuss and receive comments on the proposed amended rule. The District addressed the significant issues raised to the satisfaction of the affected stakeholders.

Compliance with Board Policy on Adopting New Rules

On February 2, 1993 (APCB #2), the Board directed that, with the exception of a regulation requested by business or a regulation for which a socioeconomic impact assessment is not required, no new or revised regulation shall be implemented unless specifically required by federal or State law. Proposed amended Rule 69.3.1 is required by State law, which calls for adoption of every feasible control measure to accelerate progress toward achieving the ambient air quality standard for ozone. Therefore, implementation of the proposed rule is consistent with the Board directive.

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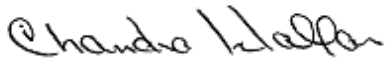
Environmental Statement

The District prepared an Initial Study pursuant to the California Environmental Quality Act to determine whether there is any evidence that adopting amendments to Rule 69.3.1 and previously proposed amendments to Rule 69.3 may have a significant environmental impact. The Initial Study revealed no substantial evidence that such actions may have a significant effect on the environment, and based on initial findings, a proposed Negative Declaration was prepared. The District published the Notice of Intent to adopt the Negative Declaration and solicited comments during a 30-day review period. No public comments were received.

Linkage to the County of San Diego Strategic Plan

The County's five-year strategic plan includes an Environment Initiative to ensure environmental preservation and enhance quality of life. Proposed amended Rule 69.3.1 will provide a significant reduction of emissions without negatively impacting the local business community. The rule balances air quality preservation, public health protection, and economic development needs.

Respectfully submitted,



CHANDRA L. WALLAR
Deputy Chief Administrative Officer



ROBERT KARD
Air Pollution Control Officer

ATTACHMENT(S)

Attachment A – Negative Declaration
Attachment B – Initial Study
Attachment C – Resolution Adopting the Negative Declaration
Attachment D – Resolution Adopting Amended Rule 69.3.1
Attachment E – Socioeconomic Impact Assessment
Attachment F – Comparative Analysis
Attachment G – Incremental Cost effectiveness
Attachment H – Change Copy
Attachment I – Workshop Report

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TECHNOLOGY (District: All)**

AGENDA ITEM INFORMATION SHEET

CONCURRENCE(S)

COUNTY COUNSEL REVIEW	<input checked="" type="checkbox"/> Yes	
Written Disclosure per County Charter Section 1000.1 Required	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
GROUP/AGENCY FINANCE DIRECTOR	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A
CHIEF FINANCIAL OFFICER	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A
Requires Four Votes	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
GROUP/AGENCY INFORMATION TECHNOLOGY DIRECTOR	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A
COUNTY TECHNOLOGY OFFICE	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A
DEPARTMENT OF HUMAN RESOURCES	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A

Other Concurrence(s): N/A

ORIGINATING DEPARTMENT: Air Pollution Control District, County of San Diego

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Air Pollution Control Officer

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PREVIOUS RELEVANT BOARD ACTIONS:

April 22, 2009 (APCB #1), Approved 2009 Triennial Regional Air Quality Strategy Revision; December 16, 1998 (APCB #4), Adoption of New Rule 69.3.1 (Stationary Gas Turbine Engines - Best Available Retrofit Control Technology) and Amendments to Rule 69.3 (Stationary Gas Turbine Engines); February 2, 1993 (APCB #2), Delayed implementation of new or revised regulations.

BOARD POLICIES APPLICABLE:

N/A

BOARD POLICY STATEMENTS:

February 2, 1993 (APCB #2)

ORACLE AWARD NUMBER(S) AND CONTRACT AND/OR REQUISITION NUMBER(S):

N/A